

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An intraluminal guide wire, comprising:
an elongated wire core having a proximal core section and a distal core section having a tapered distal end;
wherein at least a section of the elongated wire core includes at least one of randomized and non-randomized tactile surface contours;
an uninterrupted polymer coating with a generally constant outside diameter adhering to and contiguous with the at least one of randomized and non-randomized tactile surface contours for at least a portion of the elongated wire core including at least a portion of the tapered distal end and having a surface contour that follows the at least one of randomized and non-randomized tactile surface contours in the elongated wire core; and
a flexible tubular member disposed over the distal core section.
2. (Original) The intraluminal guide wire of claim 1, wherein the surface contours have a surface-to-peak amplitude of about 0.0002 to 0.002 inch.
3. (Original) The intraluminal guide wire of claim 1, wherein tactile surface contours include at least a bump.
4. (Withdrawn) The intraluminal guide wire of claim 1, wherein tactile surface contours include at least a divot.
5. (Withdrawn) The intraluminal guide wire of claim 1, wherein tactile surface contours include at least a helical pattern.

6. (Original) The intraluminal guide wire of claim 1, wherein tactile surface contours include at least a rib.

7. (Original) The intraluminal guide wire of claim 1, wherein tactile surface contours includes a plurality of ribs spaced about 0.05 cm to 2 cm apart.

8. (Withdrawn) The intraluminal guide wire of claim 1, wherein tactile surface contours include at least an undulation.

9. (Withdrawn) The intraluminal guide wire of claim 1, wherein tactile surface contours include at least a longitudinal groove.

10. (Original) The intraluminal guide wire of claim 1, wherein tactile surface contours include ridges and dips.

11. (Original) The intraluminal guide wire of claim 1, wherein tactile surface contours include at least a circumferential groove.

12. (Original) The intraluminal guide wire of claim 1, wherein the flexible tubular member is disposed over the polymer coating.

13. (Original) The intraluminal guide wire of claim 1, wherein the polymer coating is disposed over the flexible tubular member.

14. (Original) The intraluminal guide wire of claim 1, wherein the proximal core section includes a high strength steel and the distal core section includes a nickel-titanium alloy.

15. (Original) The intraluminal guide wire of claim 1, wherein the polymer coating includes a fluoropolymer.

16. (Currently Amended) An intraluminal guide wire, comprising:
an elongated core having a proximal core section and a distal core section including a taper transitioning to a distal end;
wherein an exterior surface of the distal core section includes randomized tactile surface contours as part of the distal core section itself;
a polymer coating of generally non-uniform thickness adhering without a gap to at least a portion of the distal core section including at least a portion of the tapered transition with a coating profile not following a tapered profile of the elongated core, the polymer coating having tactile surface contours following the randomized surface contours of the exterior surface of the distal core section; and
a flexible tubular member disposed over the distal core section.
17. (Original) The intraluminal guide wire of claim 16, wherein the tactile surface contours includes a rib.
18. (Withdrawn) The intraluminal guide wire of claim 16, wherein the tactile surface contours includes a helical pattern.
19. (Withdrawn) The intraluminal guide wire of claim 16, wherein the tactile surface contours includes a longitudinal groove.
20. (Withdrawn) A method for providing an intraluminal guide wire, comprising:
providing an elongated core having a proximal core section and a distal core section having a smooth exterior surface;
tapering a profile of the elongated core to transition into a distal end;
heating and extruding a polymer through a die to adhere to at least a portion of the elongated core to create a polymer coating; and

imparting into the polymer coating at least one of randomized and non-randomized tactile surface contours that are formed independently from the profile of the elongated core.

21. (Withdrawn) The method of claim 20, wherein imparting into the polymer coating includes localized heating of the polymer coating.

22. (Withdrawn) The method of claim 21, wherein localized heating includes laser heating.

23. (Withdrawn) The method of claim 21, wherein localized heating includes laser heating aimed at right angle to the elongated core while advancing and rotating elongated core past the laser.

24. (Withdrawn) The method of claim 21, wherein localized heating includes translating the polymer coating past a heat source emitting heat in cycles.

25. (Withdrawn) The method of claim 20, wherein imparting into the polymer coating includes changing an advancement speed of the elongated core through the die.

26. (Withdrawn) The method of claim 20, wherein imparting into the polymer coating include applying impulse force to polymer.

27. (Withdrawn) The method of claim 20, wherein imparting into the polymer coating at least one of randomized and non-randomized tactile surface contours includes providing bumps in at least a portion of the elongated core.

28. (Withdrawn) The method of claim 27, wherein providing bumps in at least a portion of the elongated core includes drawing the elongated core through a die.

29. (Withdrawn) The method of claim 20, wherein imparting into the polymer coating at least one of randomized and non-randomized tactile surface contours includes particle blasting the elongated core.

30. (Withdrawn) The method of claim 20, wherein the polymer includes a fluoropolymer.

31. (Currently Amended) An intraluminal guide wire, comprising:
an elongated wire core having a proximal wire core section and a distal wire core section including a taper transitioning to a distal end;
wherein an exterior surface of the distal wire core section includes randomized tactile surface contours that are part of the distal wire core section itself;
a polymer coating of generally non-uniform thickness adhering to and contiguous with at least a portion of the distal core section including at least a portion of the tapered transition with a coating profile not following a tapered profile of the elongated core, the polymer coating having tactile surface contours following the randomized surface contours of the exterior surface of the distal core section;
a flexible tubular member disposed over the distal core section,
wherein:
the surface contours have a surface-to-peak amplitude of about 0.0002 to 0.0020 inch;
the flexible tubular member is disposed over the polymer coating;
the proximal core section includes a high strength steel and the distal core section includes a nickel-titanium alloy; and
the polymer coating includes a fluoropolymer.